Bibliometric Analysis of "Research Journal of Pharmacy and Technology" : A Study

Synopsis Submitted

To

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

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Title of the Research

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1. Introduction

The 20th Century may be called as the century of metrics of sciences. In this century there have been the developments of Bibliometrics, Scientometrics, Webometrics and Informatics etc. The term Bibliometric was first used by Pritchard in 1969,[1] as the application of mathematical and statistical methods to books and other media of communication. It included relationship among number of papers, growth of literature and patterns of library database usage. Bibliographic databases are representative samples of publication activity in the field of knowledge (Vijay Kumar p. 2004). Bibliometric methods are most often used in the field of library and information science to measure and analyze the productivity of literature in a specific field or journal.

Pharmaceutical science is an interdisciplinary field and is a dynamic area. It is important for the discovery and development of new medicines and treatment. Journals are the most up-to-date medium of scholarly communication. Researchers they publish their results in a reputed journals. The Research Journal of Pharmacy and Technology (RJPT) is a peer reviewed and multidisciplinary journal in the field of pharmaceutical sciences. It was published quarterly during 2008 to 2010 (Vol.1 to Vol.3). Now it is published monthly since the year of 2011 (vol.4) onwards. RJPT publishes original research articles, short communications and review articles from all over the world in the field of pharmaceutical sciences. RJPT journal is indexed with SCOPUS, ProQuest, CAS,ISA ,Google Scholar , EBISCO, etc. Therefore, it was important to carry out a bibliometric study of RJPT as no such study of RJPT has been carried out.

2. Importance of Bibliometric Studies

Bibliomtric study is mainly required because of two major issues, one is information explosions and another is shrinking of library budget. In the present environment literature related to any subject is available in high prices and it is not possible for any library to purchase all the published reading material of any subject. In this circumstances need of bibliometric analysis of publication becomes very useful for researches, teachers and scientists. Bibliometrics is a quantitative and statistical

analysis to know about the growth, trends and publication pattern of any subject field. This study will helpful for researcher, students and pharmacy college librarians for their core journal collection in the library.

3. Meaning of Bibliometric

Bibliometrics is a set of techniques to quantitatively evaluate the scientific and technological publications. While bibliometric techniques are most frequently used in the field of library and information science, etymologically bibliometrics is composed of two distinct parts i.e. “Biblio” and “Metrics”. The prefix biblio is a Latin / Greek word meaning “books” and “metrikos” means “measurement”. So bibliometrics connotes the science of measurement pertaining to books or documents.

4. Definition:-

Alan Pritchard (1969) who as coined the term bibliometrics and defined that bibliometrics deals with the application of mathematics and statistical methods to books and other media of communication.

According to Fairthrone (1969) bibliometrics as “quantitative treatment of properties of recorded discourse and behavior appearing to it.” Bibliometrics is also explained as a quantitative analysis of bibliographic feature of the body of literature.

The British Standard Institution (1976) described Bibliometrics as the “application of mathematical and statistical methods in the study of the use of documents and publication patterns”.

According to Potter (1981), Bibliometrics is a means for the study and measurement of all forms of written communication, their authors and publication patterns. (Desai, K. D. 2014) 6

5. Statement of Problem

Research publications are the major component in the scientific and academic field. Research publications are lead to recognize an individual discipline, Institution, and country so on. The scientific researchers and academic professionals are acknowledged only after the publication made. Hence, publications are the professional norm in scientific sense and serve the individuals. By keeping this view in mind, the researcher aim to analyze the peer review, reputed, scientific publication in the field of pharmaceutical sciences. So that Research Journal of Pharmacy and Technology has identified journal in pharmaceutical science field. The

present study entitled **Bibliometric Analysis of "Research Journal of Pharmacy and Technology" : A Study**

6. Review Related Literature

A literature review is an account of what has been published on a subject by an author, researchers and subject experts. It constitutes an integral part of any research, its main goal are to situate the current study within the body of literature and to provide context for the research literature review is an essential part of any research in an academic area.

Bharviet.al (2007) studied 1317articles published in the international journal scientometrics of first fifty volumes identified that compared to the USA, Netherland , India, France and Japan are on increasing productivity is dominated by single authored papers.

Serenk et.al (2010) studies 11 primary knowledge management and intellectual capita peer reviewed journals and made a bibliometric analysis of body literature, analyzed the institutional and individual productivity, collaborative pattern frequency of publication and other related factors.

Mulla, K. R. (2020) studied five volumes of the journals of Education libraries and made a bibliometric analysis of articles of authorship pattern, degree of collaboration, geographical distribution of papers and citation analysis.

Few scientometric studies have been published in the area.-

Reddy and Mahesh Kumar (2006) provided a scientometric analysis of world papers published by 57 countries in 10 major subject specialties appearing in three leading international journals during the 10 years period.

Dostan et.al (2011) analyzed the changes in the authorship and characteristics of articles in pharmacy journals during the 20 year period in the field of bibliometrics of country output in pharmacology only a few studies have been carried out in India.

Ahila et. al (2011), Gupta Titu and Kumar, (2018), Chamman Kumar and Biradar (2017) analyzed the research output performance pharmacology and biomedicine. A total of 22065 research articles published in web of science were analyzed to find out the performance of scientists from all over the world in terms of growth during the period of 1999 to 2010 (12 years), annual growth rate, global publication share and rank among 15 countries of the world, authorship pattern,

high productive institutions, journals discussed.

Hugar, J. P., Chaman, Sab., M. (2018) analyzed the research output performance on pharmaceutical science subject. A total 1913 research articles publish in web of science database were analyzed to find out the performance of pharmaceutical sciences professionals from all over the world. Annual growth rate, global publication shares, prolific author in the field , high productive institutions journals are studied.

Jagtap, Vikas (2016) analyzed 578 articles were published during the period 2011 to 2014 in the Indian Journal of Medical Research. The analysis mainly covered the year wise distribution, category wise classification, subject wise distribution etc.

Varma, Neha and Kunwar, Singh (2016) found that "the study of authorship pattern or productivity is one of the important aspect in the bibliometric analysis. This aimed to examine the authorship pattern and degree of collaboration in journals.

Jain, Swati (2015) Concluded that most articles were published case reports followed by researches indicating inclination towards better quality methodology.

Velmurgan, C., Radhakrishnan, N. (2016) analyzed each articles ,year wise distribution of contributors and number of authorship, volume wise authorship , authors productivity, single and multiple authored papers.

Thanuskodi, S. (2011) analyzed the journal titled "Library Herald" for the period between 2006 to 2010. The analysis covered mainly the number of articles, average number of articles , average number of references per articles , forms of document cited , year wise distribution of cited journals etc.

Sourour Idoudi, et. al. studied 123 articles were published with an average annual growth rate 6.7% in publications and 946 citations. Many publications were classified under Q1 and Q2 journals.

Thakur, Vinodkumar et. al (2021) analyzed 978 research publications which received 15318 citations with an average citation per paper of 15.66%. Publication share and citation share of the institute are 10.92% and 10.95% respectively.

Kumar (2019) studied research output Guru Jambheshwar Agriculture University study of CCS Haryana Agriculture University (CCSHAU) for the period from 2001-2015.

6. Objective of the Study

The present study has been undertaken with the objective of analyzing the following aspects:

- To classify the number of contributions published during the period of study.
- To find out the year wise distribution of articles.
- To study the authorship pattern of articles.
- To classify geographical distribution of articles.
- To study subject wise distribution of articles.
- To identify the length of articles.
- To apply bibliometric laws to the data.

7. Hypothesis of the Study

Proposed topic of research is " Bibliometric Analysis of Research Journal of Pharmacy and Technology : (2008 - 2023) A study" : The hypothesis of the proposed study is;

1. It is assumed that the journals are most favored category of documents of the Researcher.
2. It is assumed that the Indian journals are most favored by researcher as compared to foreign journals.
3. It is assumed that the Indian authors are most frequently referred by researchers.
4. The bibliometric laws can be verified on collected data.

8. Scope and Limitation of the study

The scope of the present study is confined to the bibliometric analysis of the "Research Journal of Pharmacy and Technology " for 16 years from 2008 to 2023. During the period of study, the particular journal published 16 volumes in which 168 issues come and around 10,000 articles will be published in the particular journal which will be considered for the present study.

9. Importance of the study

Present study is focus on the Research Journal of Pharmacy and Technology in the subject of pharmacy and its related subjects. This research will helpful to the pharmacy professionals, researcher and library professionals.

10. Need of the study

Research publications are just like a mirror to show us the growth and development of research in every field. Due to the emergence of advanced technology, hundreds of thousands of publications emerged. There is no assurance all of these are quality in nature. The researchers, academic professionals, and scientists are facing difficulties to identify and publish their research results in suitable publications. A researcher or institution and country will be recognized only after the quality publication is published. Then only they survive, recognize and acknowledge in their field. The contribution of individual research publications leads to enhance the growth and development of an institution and country in an academic way. That's why the academic and scientific research institutions are more concentrate on quality of publications. Therefore, bibliometric study needed to be identifying the recent trend in any specific field or subject. Hence, the researcher intends to carry a bibliometric study on the Research Journal of Pharmacy and Technology which belongs to pharmaceutical sciences.

11. Source Journal

Research Journal of Pharmacy and Technology is a leading monthly journal published by A & V Publication, Raipur, Chhattisgarh, India. It is started as a quarterly journal in the year of 2008. It was published quarterly during 2008 to 2010 (Vol.1 to Vol.3). Now it is published monthly since the year of 2011 (vol.4) onwards. It is a peer reviewed, multidisciplinary research journal in the area of pharmacy and technology. RJPT publishes full research papers short communications, and review articles in pharmaceutics and pharmacokinetics, pharmaceutical chemistry, pharmacognosy including herbal products standardization and photochemistry, pharmacology allied sciences including drug regulatory affairs, pharmaceutical marketing, pharmaceutical microbiology, pharmaceutical education and hospital pharmacy.

The publications of RJPT indexed and abstracted with SCOPUS, ProQuest, CAS Abstract, CAS (Chemical Abstract Service), ISA (Indian Citation Index), Google Scholar, CINKI scholar, EBSCO discovery etc.

12. Research Methodology

Research methodology is a way of systematically solving the Research problem. It may be understood as a science of studying how research is done scientifically.

According to P. V. Young, "Research methodology, is the systematic method of discovering new facts and verifying old facts, their sequence, inter-relationships, casual explanations and natural laws which govern them" (Kothari, 1990).

Methodology applied in the present study is bibliometric analysis which is used to study in detail the bibliographic features of the articles and citation analysis of reference appended at the end of each article, published in Research Journal of pharmacy and Technology from the year 2008 to2023. The data pertaining to Research Journal of pharmacy and Technology around 10,000 articles made from volume 1 in 2008 to volume 16 in 2023. Data will be collecting from website of the journal website www.anvpublication.org. All the bibliographic details were noted and a computerized database is then created for in-depth analysis.

13. Chapter Scheme of Research

The study is divided into different chapters as follows.

Chapter 1 : Introduction

Chapter 2 : Review of Related literature

Chapter 3 : Bibliometric analysis: An overview

Chapter 4 : Data Analysis and Interpretation

Chapter 5 : Conclusion and Suggestions

Bibliography

References

1. Ahila, M. and Nagarajan, M. (2018). "Research publication trend on pharmacology research". Library Progress (International), 31(1), 79-89.
2. Chaman, Sab, M., Dhamni Kumar, P., and Biradar, B.S.(2017) "Mapping of Indian Biomedicine Research : A Scientometric analysis of research output during 2012- 2016". International Journal of Current Advanced Research. 6 (7), 4688-4691.

3. Daim T U, Rudeda G, Martin H,andGerdsri P,(2006). Forecasting emerging technologies: Use of bibliometrics and patent analysis, Technological Forecasting and Social Change, 73 (8), 981- 1012.
4. Desai, K. D. (2014). Bibliometric analysis of DESIDOC Journal of Library and Information Technology (DJLIT) during 2012. Asian Journal of Multidisciplinary Studies, 2(6), 28-34.
5. Gupta, B., Ritu, G., and Kumar, A. (2018). " Acute Pancreatitis Research in India: A Scientometric Assessment of publications during 2007- 2016". Kenkyu Journal of Gastroenterology. 1(3), 1-13.
6. Hugar, D.P. and Chaman, Sab M. (2018). "Research publication trend in pharmaceutical sciences : A Bibliometric analysis 2013 to 2017". International journal of Library and Information Studies. vol.8 (1) ,115 -122.
7. Jagtap, vikas (2017). "Bibliometric analysis of the Indian Journal of Medical Research (2011-2014)" " Knowledge Librarian " An International peer reviewed bilingual e- journal of library and information science. vol. 4 (4), 54-63.
8. Jain, Swati (2015). "Bibliometric analysis of journal of clinical and dialogistical research (Dentistry) section : 2007- 2014" Journal of Clinical and Diagnostic Research . 9 (4), 47-51.
9. Kamal, L. and Jena, A. A. (2006). Bibliometric analysis of the 'Indian Journal of Fiber and Textile Research 1996-2004', Annals of Library and Information Studies, 53 (1) ,22-30.
10. Varma, Neha and Kunwar, Singh (2017)" Authors productivity and degree of collaboration in journal of Librarianship and Information Science" Journal of Information Studies.7 (4).
11. Kumar, B., Mcanus, K.P., Whittaker, P. (2011). "Authorship and characteristics of citations in pharmacy journals: changes over 20 year interval" Annuals of Pharmacotherapy, 45 (3).
12. Kumar, Anil (2019). "Research output of Guru Jambheshwar University of science and technology during 1999-2018: A Bibliometric study" International Journal of Information Dissemination and Technology. 9(1) , 12-17.
13. Mueen, Ritu, G., Gupta, B.(2014)."High productivity pharmaceutical organizations in India. A study of their performance during 2008-2012." Journal of young pharmacists. 6 (2), 4-13.

14. Pritchard, A. (1969). Statistical bibliography or bibliometrics. Journal of Documentation, 25, 348-349.
15. Ramkrishnan J. and Babu, B. R.,(2007). Literature on hepatitis (1984-2003): A bibliometric analysis, Annals of Library and Information Studies, 54,195-200.
16. Reddy, PMK., Mahesh Kumar, K.N. (2006). "A Scientometric analysis for identifying major specialties for pharmacological research and geographical contributions." Indian Journal of pharmacology, 38 (2),137-139.
17. Siwach, A. K., and Parmar, Seema (2018). "Research contributions of CCS Haryana Agriculture University, Hissar : A Bibliometric analysis." DESIDOC journal of library and information technology. 38(5), 334-341.
18. Sourour Ioudi, Mhamad Izham, Feras, Aladi (2021). "A Bibliometric analysis of pharmaceutical sciences relates articles in Qatar from 2013-2020." Journal of Pharmaceutical International , 33(31A),116-123.
19. Subramanyam, K. (1983). Bibliometric studies of research collaboration: A review. Journal of Information Science, 6, 33-38.
20. Thakur, Vinodkumar., Siwach, Anilkumar., Devi, Poornima (2021). "Biblometric analysis of publication of university institute of pharmaceutical sciences (UIPS) Punjab University, Chandigarh." Philosophy and practice (e-journal ,1-15.
21. Thanukodi, S. (2011). "Library Herald Journal: A Bibliometric Study" International referred research journal. 2 (4).
22. Velmurgan, C., Radhakrishnan, N. 2016). "Indian Journal of Biochemistry: A Bibliometric study" Innovative Journal of sciences. 4 (1),1-7.

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